



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,242	12/03/2001	Toshihide Kuriyama	Q67488	5484

7590 07/29/2005

SURGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
----------	--------------

2643

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/998,242

Applicant(s)

KURIYAMA ET AL.

Examiner

TUAN A. PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 6 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/3/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 11 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler et al. (U.S. Patent No.: 6,011,519, hereinafter, "Sadler") in view of Kivela (U.S. Patent No.: 6,005,525).**

Art Unit: 2643

**Regarding claim 1**, Sadler teaches a cellular phone including first and second housing, forming a pair of housings, folded upon each other when the cellular phone is closed, the cellular phone comprising (see figure 8):

two planar antennas disposed within the pair of housing (see figure 9, first antenna 34, second antenna 36, col.4, ln.25-40).

It should be noticed that Sadler fails to teach a surface having the greatest directivity of the antenna is directed outward when the cellular phone is closed.

However, Kivela teaches such features (see figure 11, col.9, ln.25-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kivela into view of Sadler in order to reduce the radiation toward to the body as suggested by Kivela at column 1, lines 30-40.

**Regarding claim 3**, Sadler further teaches the cellular phone wherein the two planar antennas are disposed at an outermost position inside the pair of housings, respectively, when the cellular phone is closed (see figure 9, antennas 34 and 36 are on the back of the housing. Both of antennas will disposes when the housing is folded).

**Regarding claim 5**, Kivela further teaches the compact cellular phone wherein when the compact cellular phone is used while being closed in a waiting state, one of the two planar antennas is used to send or receive, and when the compact cellular phone is used while being open in a communication state, one of the two planar antennas, which has the better transmission state, is selected to send and receive (see figures 11 and 12, col.9, ln.25-38).

Art Unit: 2643

**4. Claims 2, 4, 7-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler et al. (U.S. Patent No.: 6,011,519, hereinafter, "Sadler") in view of Kivela (U.S. Patent No.: 6,005,525) as applied to claim 1 above, and further in view of Narayanaswamy et al. (U.S. Patent No.: 5,905,467, hereinafter, "Narayanaswamy").**

**Regarding claim 2,** Sadler and Kivela, in combination, fails to teach an interval between the two planar antennas disposed within the pair of housings is equal to or wider than a width of a human palm when the cellular phone is open. However, Narayanaswamy teaches such features (see figure 2, antenna 204, antenna 205).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Narayanaswamy into view of Sadler and Kivela, in order to reduce the signal by user's head as suggested by Narayanaswamy at column 1, lines 43-56.

**Regarding claim 7,** Sadler further teaches the cellular phone wherein the two planar antennas are disposed at an outermost position inside the pair of housings, respectively, when the cellular phone is closed (see figure 9, antennas 34 and 36 are on the back of the housing. Both of antennas will disposes when the housing is folded).

**Regarding claims 8 and 4,** Narayanaswamy further teaches the cellular phone wherein the two planar antennas are two planar inverse F-type antennas or two patch antennas (see col.3, ln.30-40).

**Regarding claim 9,** Kivela further teaches the cellular phone wherein when the cellular phone is used while being closed in a waiting state, both of the two planar

Art Unit: 2643

antennas or either one of the two planar antennas is used to send or receive, and when the compact cellular phone is used while being open in a communication state, one of the two planar antennas, which has the better transmission state, is selected to send and receive (see figures 11 and 12, col.9, ln.25-38).

**Regarding claim 11**, Narayanaswamy further teaches an interval between said two planar antennas disposed within said pair of housings is at least three inches when said cellular phone is open (see figure 2, antenna 204, antenna 205).

***Allowable Subject Matter***

5. Claims 6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (571) 272-7499 and

**IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (571) 272-2600 FOR THE SUBSTITUTIONS OR COPIES.**

Art Unit: 2643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643  
July 25, 2005  
Examiner

Tuan Pham



CURTIS KUNTZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600